

## USDA National Nutrient Database for Standard Reference Release 28

## Statistics Report 09128, Grapefruit juice, white, raw

Report Date: October 23, 2015 02:22 EDT

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per 100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
<b>Proximates</b>													
Water	g	90.00	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Energy	kcal	39	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Energy	kJ	163	--	--	--	--	--	--	--	--	Calculated or imputed	--	01/2007
Protein	g	0.50	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Total lipid (fat)	g	0.10	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Ash	g	0.20	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Carbohydrate, by difference	g	9.20	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Fiber, total dietary	g	0.1	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Sugars, total	g	9.10	--	--	--	--	--	--	--	--	Calculated or imputed	--	01/2003
<b>Minerals</b>													
Calcium, Ca	mg	9	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Iron, Fe	mg	0.20	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Magnesium, Mg	mg	12	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Phosphorus, P	mg	15	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Potassium, K	mg	162	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Sodium, Na	mg	1	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Zinc, Zn	mg	0.05	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Copper, Cu	mg	0.033	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Manganese, Mn	mg	0.020	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Selenium, Se	µg	0.1	--	--	--	--	--	--	--	--	Calculated or imputed	--	12/1997
<b>Vitamins</b>													
Vitamin C, total ascorbic acid	mg	38.0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Thiamin	mg	0.040	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Riboflavin	mg	0.020	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Niacin	mg	0.200	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Pantothenic acid	mg	0.189	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Vitamin B-6	mg	0.044	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Folate, total	µg	10	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Folic acid	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2001
Folate, food	µg	10	--	--	--	--	--	--	--	--	Calculated or imputed	--	01/2007
Folate, DFE	µg	10	--	--	--	--	--	--	--	--	Calculated or imputed	--	01/2007
Choline, total	mg	7.7	--	--	--	--	--	--	--	--	Calculated or imputed	09112	01/2007
Vitamin B-12	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	08/1982
Vitamin B-12, added	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Vitamin A, RAE	µg	1	--	--	--	--	--	--	--	--	Calculated or imputed	--	01/2007
Retinol	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	06/2002
Carotene, beta	µg	4	--	--	--	--	--	--	--	--	Calculated or imputed	09116	01/2007
Carotene, alpha	µg	2	--	--	--	--	--	--	--	--	Calculated or imputed	09116	01/2007
Cryptoxanthin, beta	µg	1	--	--	--	--	--	--	--	--	Calculated or imputed	09116	01/2007

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Vitamin A, IU	IU	10	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2007
Lycopene	µg	0	--	--	--	--	--	--	--	--	Calculated or imputed	09116	01/2003
Lutein + zeaxanthin	µg	10	--	--	--	--	--	--	--	--	Calculated or imputed	09116	01/2003
Vitamin E (alpha-tocopherol) <sup>1</sup>	mg	0.22	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Vitamin E, added	mg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Tocopherol, beta <sup>1</sup>	mg	0.00	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Tocopherol, gamma <sup>1</sup>	mg	0.00	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Tocopherol, delta <sup>1</sup>	mg	0.00	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	01/2003
Vitamin D (D2 + D3)	µg	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	11/2008
Vitamin D	IU	0	--	--	--	--	--	--	--	--	Assumed zero	--	02/2009
Vitamin K (phylloquinone)	µg	0.0	--	--	--	--	--	--	--	--	Calculated or imputed	09123	01/2003
<b>Lipids</b>													
Fatty acids, total saturated	g	0.014	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
4:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
6:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
8:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
10:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
12:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
14:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
16:0	g	0.012	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
18:0	g	0.001	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Fatty acids, total monounsaturated	g	0.013	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
16:1 undifferentiated	g	0.001	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
18:1 undifferentiated	g	0.012	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
20:1	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
22:1 undifferentiated	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
Fatty acids, total polyunsaturated	g	0.024	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
18:2 undifferentiated	g	0.019	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
18:3 undifferentiated	g	0.005	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
18:4	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
20:4 undifferentiated	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
20:5 n-3 (EPA)	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
22:5 n-3 (DPA)	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
22:6 n-3 (DHA)	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Fatty acids, total trans	g	0.000	--	--	--	--	--	--	--	--	Assumed zero	--	06/2015
Cholesterol	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	08/1982
<b>Other</b>													
Alcohol, ethyl	g	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	04/1985
Caffeine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2003
Theobromine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2003
<b>Flavonoids</b>													
Flavanones													
Eriodictyol <sup>2 3 4</sup>	mg	0.64	--	0.38	0	11.35	--	--	--	--	--	--	--
Hesperetin <sup>2 3 4 5</sup>	mg	2.34	--	0.95	0	34.93	--	--	--	--	--	--	--
Naringenin <sup>2 3 4 5 6</sup>	mg	18.22	--	1.52	0	58.02	--	--	--	--	--	--	--
Flavones													
Apigenin <sup>2 7</sup>	mg	0.00	--	0	0	0	--	--	--	--	--	--	--
Luteolin <sup>7</sup>	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Flavonols													
Kaempferol <sup>7</sup>	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Myricetin <sup>7</sup>	mg	0.04	--	--	0.04	0.04	--	--	--	--	--	--	--
Quercetin <sup>2 5 7</sup>	mg	0.39	--	0.05	0	0.74	--	--	--	--	--	--	--

Sources of Data

<sup>1</sup>Nutrient Data Laboratory, ARS, USDA Determination of the Tocopherol Content of Selected Foods, 1992 Beltsville MD

<sup>2</sup>Adhikari, D. P., Francis, J. A., Schutzki, R. E., Chandra A., and Nair, M. Quantification and characterization of cyclooxygenase and lipid peroxidation inhibitory anthocyanins in fruits of Amelanchier., 2005 Phytochem. Anal 16 pp.175-180

<sup>3</sup>Mouly, P. P., Arzouyan, C. R., Gaydou, E. M., and Estienne, J. M. Differentiation of citrus juices by factorial discriminant analysis using liquid chromatography of flavanone glycosides, 1994 J. Agric. Food Chem. 42 pp.70-79

<sup>4</sup>Mouly, P., Gaydou, E. M., and Estienne, J. Column liquid chromatographic determination of flavanone glycosides in Citrus., 1993 J. Chromatogr. 634 pp.129-134

<sup>5</sup>Vanamala, J., Reddivari, L., Yoo, K. S., Pike, L. M., and Patil, B. S. Variation in the content of bioactive flavonoids in different brands of orange and grapefruit juices., 2006 J. Food Comp. Anal. 19 pp.157-166

<sup>6</sup>Berhow, M., Tisserat, B., Kanes, K., and Vandercook, C. Survey of phenolic compounds produced in citrus., 1998 Technical Bulletin Number 1856, ARS, USDA, December 1998.

<sup>7</sup>Hertog, M. G. L., Hollman, P. C. H., and van de Putte, B. Content of potentially anticarcinogenic flavonoids of tea infusions, wines, and fruit juices., 1993 J. Agric. Food Chem. 41 pp.1242-1246